

Application No.: Not Yet Assigned

Docket No.: A8319.0015/P015-A

REMARKS

Claims 7-10 have been amended. The application contains claims 7-10. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

The drawings are objected to under 37 C.F.R. § 1.83(a), and claim 7 is objected to as being informal. Reconsideration is respectfully requested. The claims have been amended to obviate the objections.

Claims 7 and 8 are rejected under 35 U.S.C. § 103 as being anticipated by Tsuji. Reconsideration is respectfully requested.

The present invention relates to an apparatus that has plural battery modules connected in series, corresponding low order control devices, a high order control device which controls the low order control devices, a voltage detecting unit 1 (Fig. 2) which detects battery cell voltages, and an error compensation means 18 (Fig. 7) which compensates an error of the voltage detected by the detecting unit 1. Thus, claim 7, as amended, recites "error compensation means which compensates an error of a voltage detected by the voltage detecting unit." The recited "error compensation means" is an important feature of the claimed invention.

Tsuji discloses that in order to suppress the variation of charge amounts among plural battery cells connected in series, an A/D converter detects an open-circuit voltage of each battery cell, and then converts the detected voltages into digital values from analog values and outputs the digital values to a CPU. The CPU obtains a mean value and a standard deviation of the open-circuit voltages based on the frequency

Application No.: Not Yet Assigned

Docket No.: A8319.0015/P015-A


distribution of the open-circuit voltages of each battery cell, to set an adjusted target voltage for each battery cell, and controls the open-circuit voltages of each cell so that the terminal voltage of each cell reaches the adjusted target voltage. Unlike the present invention, Tsuji does not compensate the error of the voltage detected by the voltage detecting unit.

The Office Action contends that Tsuji suggests that the output of the A/D converter is sent to the battery controller and an error is obtained. Please note, however, that in Tsuji the CPU obtains a mean value and standard deviation of the open-circuit voltages based on the frequency distribution of the open-circuit voltages of each battery cell to set an adjusted target voltage for each battery cell. This merely means that the open-circuit voltage values are subjected to statistical processing to set a target value of charged amount for each battery cell. Tsuji does not teach or suggest anything about error compensation of the detected voltage.

Claims 8 depends from claim 7 and should be allowable along with claim 7, and for other reasons. The indication that claims 9 and 10 are allowable is gratefully acknowledged. Allowance of the application with claims 7-10 is solicited.

Dated: December 9, 2004

Respectfully submitted,

By 

Mark J. Thronson

Registration No.: 33,082

DICKSTEIN SHAPIRO MORIN &

OSHINSKY LLP

2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700